CALIFORNIA STATE SCIENCE FAIR
2016 PROJECT SUMMARY

Name(s)

Zachary W. Behn

Project Number

36123

Project Title

Hockey Puck Speed Test

Abstract

Objectives/Goals

The objective of this study is to determine effects on the speed of a hockey puck made of different materials on an ice surface.

Methods/Materials

Hockey pucks fabricated of ice, wax, fiberglass, plastic, and standard hockey puck. Launching apparatus made from a bow, wood and hockey stick, stopwatch, video camera, cones, ice rink. Pucks were launched at a constant speed. Time measured for a distance of 10-feet to find speed data.

Results

10 trials completed per puck. Results indicated that fiberglass pucks traveled the fastest and the standard hockey puck travel the slowest on ice.

Conclusions/Discussion

The fiberglass puck went the fastest out of all of the trials. I found the friction is less when both materials are the same. Errors that I made were that the pucks were not all the same weight. Having the same weight could have made the pucks go faster and the speed results may not have been due to the effects of friction. I could improve this experiment by adding pennies to even out the weights. Another mistake that I made was that the pucks were not perfectly the same shape. I could improve the shape by making a mold and covering the top with a piece of wood to flat surface.

Summary Statement

Speed of different material pucks were tested on the ice to see which material would travel the fastest.

Help Received

My dad helped me make the pucks and launcher, my hockey coach supplied the ice rink, my friend's father made the hockey molds, Mrs. Shimshock helped me improve my experiment